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InformUS

Description

InformUS helps users learn more about the USA and their elected representatives. Users can take short quizzes on their knowledge of the United States. Questions range from general civics to questions about the current President, Cabinet members and Congress. InformUS allows users to add their own questions to the database.

Users can also lookup their elected Congress members and contact them by email or phone. The App will also allow them to access a Congressperson's YouTube, Facebook, Web page and Twitter information.

Intended User

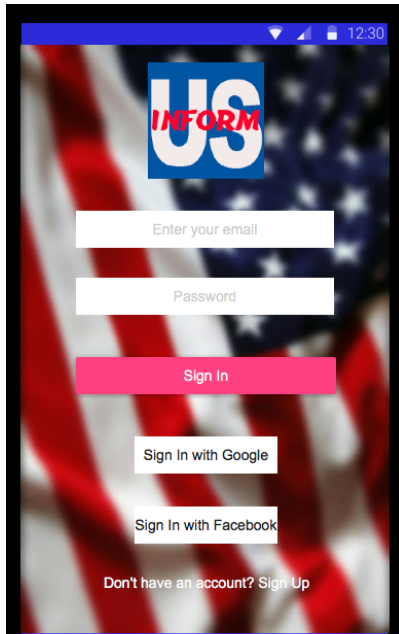
This app is appropriate for anyone that wants to become a more involved and informed US citizen or any non US resident that would like to know more about the United States.

Features

- Provides login and user authentication
- Quizzes users on their knowledge of the United States
- Stores results and graphs results progress
- Allows users to research and provide their own questions
- Users may lookup information about their elected officials by state, zip and last name
- Contact links are given to contact elected official by email or telephone
- Links are provided for YouTube, Facebook, Web page and Twitter information

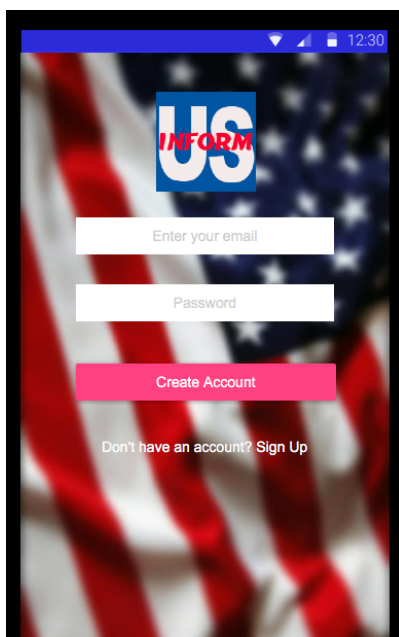
User Interface Mocks

Login Screen



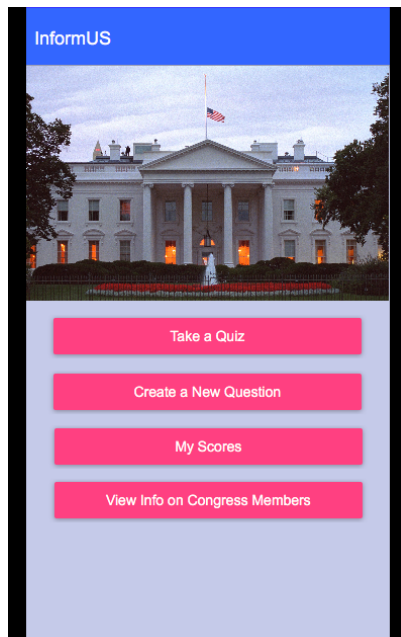
The login screen will allow a user to login using an email and password or their google or Facebook Credentials.

Create Account



The Create Account screen is used to create a new user with email and password.

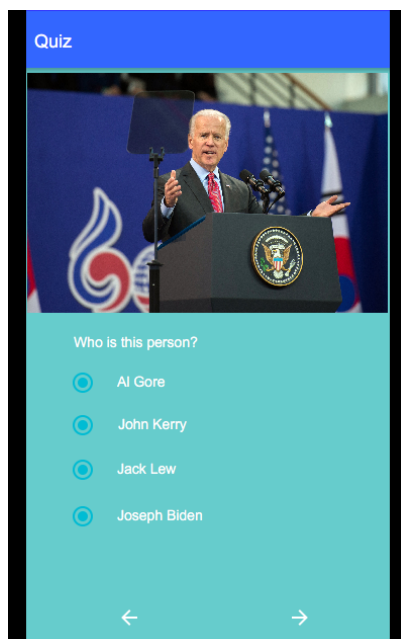
InformUS MainActivity



The InformUS MainActivity screen lets the user choose the following options:

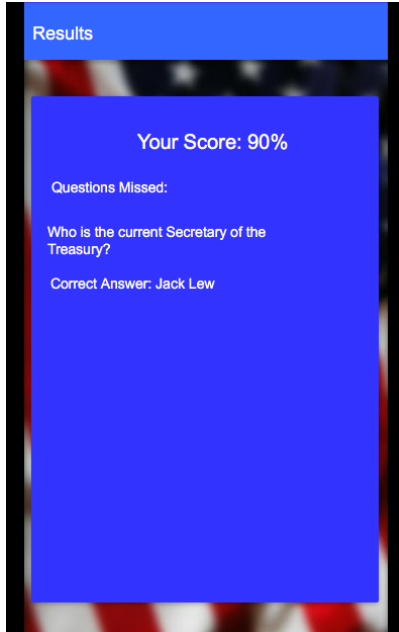
- Take a quiz on their knowledge of the United States.
- Add a question to the question database.
- View a graph and table of their previous scores.
- Look at information about members of Congress.

Quiz Screen



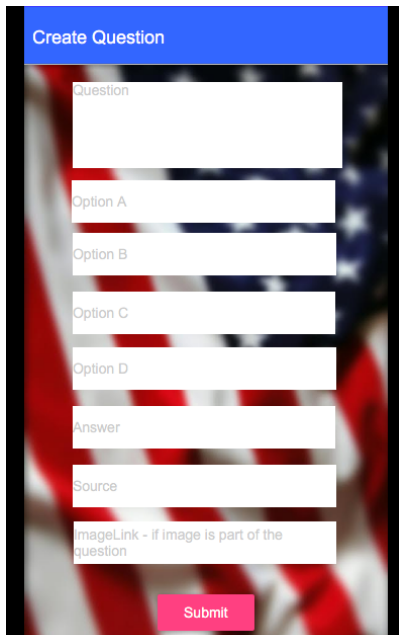
The Quiz screen display the quiz questions. The arrows are used to navigate to different questions. When the last question is reached the right arrow is replaced by Complete Quiz. When Complete Quiz is pressed, the results are displayed.

Results Screen



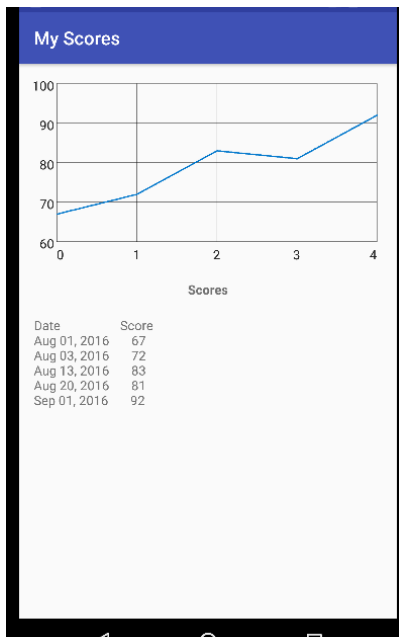
The results screen shows the score on the quiz and any missed questions.

Create Question Screen



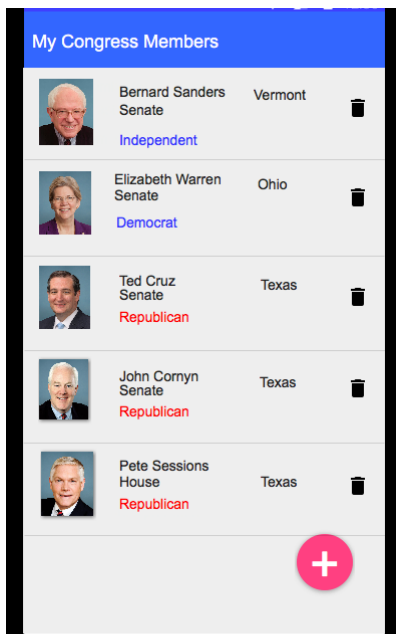
The Create Question screen allows a new quiz question to be created.

My Scores



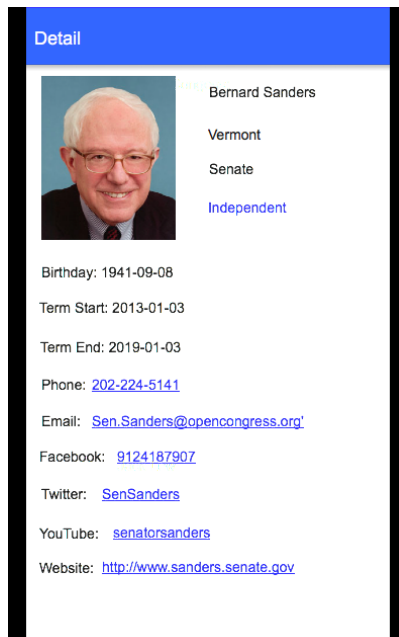
The My Scores screen will allow the user to view their progress in learning about the United States.

My Congress Members



The My Congress Members screen will allow the user to view a list of their list of Congress Members of interest. A new member or members can be added with the floating action button. A member can be deleted by pressing the trash button.

Detail



The Detail screen shows more information about the Congressional member. Content providers will be used to allow one to call, send an email or view their Facebook, Twitter, Youtube, or Website.

Widget



The Widget will allow a user to directly enter a section of the app.

Key Considerations

InformUS will use Firebase for authentication and storage of current questions and user generated potential questions. A local database and content provider will be used for storing information about members of congress. Values will be periodically updated by a sync adapter.

The UI will need to navigate back and forth from content providers (YouTube, Facebook, Twitter, etc) and the App.

The app will use the following libraries and Google Services:

- Glide will be used to cache and display images smoothly
- Google Play Services for advertising
- Google Play Services Authorization for login
- Appcompat for previous version compatibility
- Firebase database for quiz questions
- Gson for json parsing

Required Tasks

Project Setup

- Configure libraries
- Setup Firebase Online
- Review examples and tutorials on Firebase
- Readup on required Google and Firebase Libraries

Implement UI

- Build UI for Login
- Build UI for CreateAccount
- Build UI for MainActivity
- Build UI for Quiz
- Build UI for Results
- Build UI for Create Question
- Build UI for My Scores
- Build master detail flow for My Congress members/detail (for tablet support)
- Build Widget UI

Implement Login and Account Creation

- Setup Firebase Authorization
- Code account creation with email and password
- Test account creation with email and password
- Code account creation with Google+
- Test account creation with Google+
- Code account creation with Facebook
- Test account creation with Facebook
- Code login with email and password
- Test login with email and password
- Code login with Google+
- Test login with Google+
- Code login with Facebook
- Test login with Facebook

Implement Databases

- Design question database and model for Firebase
- Design potential question database and model for Firebase
- Create appropriate models for the Firebase Databases
- Write code for Firebase Database
- Test above design with insertions and deletions
- Design sqlite database for Congress Members
- Code sqlite database for Congress Members
- Test sqlite database for Congress Members
- Create Content provider with exportable = false
- Test Content Provider

Implement Sync Adapter

- Learn Sunlight Congress API
- Obtain Sunlight API Key
- Test needed REST calls using REST Client
- Create Sync Adapter Code
- Test Sync Adapter Code

Implement Backing Code for UI

- Implement backing code for MainActivity
- Test backing code for MainActivity
- Implement backing code for Quiz

- Test backing code for Quiz
- Implement backing code for Results
- Test backing code for results
- Implement backing code for Question
- Test backing code for Question
- Implement backing code for My Scores
- Test backing code for My Scores
- Implement backing code for master detail flow for My Congress members/detail (for tablet support)
- Test backing code for master detail flow for My Congress members/detail (for tablet support)
- Implement backing code for Widget
- Test backing code for Widget

Add Google Services

- Add advertising
- Test Advertising
- Add analytics
- Test analytics
- Test previously added authentication

Submit to Play Store

- Beta Test on the Play Store
- Final Submission